

IN THE CLAIMS:

Please ~~CANCEL~~ claims 1-18 and 27, without prejudice or disclaimer.

Please **AMEND** claim 19 as follows. The remaining claims are reprinted, as a convenience to the Examiner, as they presently stand before the U.S. Patent and Trademark Office.

~~1-18~~ CANCELED.

19. (ONCE AMENDED) An adaptive writing [method] circuit for writing input data on an optical recording medium using a write pulse for a light source and whose waveform comprises a first pulse, a last pulse and a multi-pulse train, the adaptive writing circuit comprising:

a discriminator to discriminate a magnitude of the present mark of the input data and magnitudes of the leading and/or trailing spaces of the present mark;

a generator to control the waveform of the write pulse in accordance with the magnitude of the present mark of the input data and the magnitudes of the leading and/or trailing spaces to generate an adaptive write pulse; and

a driver to drive the light source by converting the adaptive write pulse into a current signal in accordance with driving power levels for respective channels for the adaptive write pulse.

20. (NOT AMENDED) The adaptive writing circuit according to claim 19, wherein the generator includes:

a write waveform controller to generate pulse width data to vary a width of the first pulse in accordance with the magnitude of the leading space and the magnitude of the present mark and to vary a width of the last pulse in accordance with the magnitude of the present mark and the magnitude of the trailing space; and

a write pulse generator to generate the adaptive write pulse in accordance with the pulse width data.

21. (NOT AMENDED) The adaptive writing circuit according to claim 20, wherein the write waveform controller comprises a memory in which the pulse width data of the first and/or last pulses of the write pulse waveform are stored, by grouping the magnitude of the present mark and the magnitudes of the leading and/or trailing spaces, into a short pulse group, a middle pulse group or a long pulse group.

22. (NOT AMENDED) The adaptive writing circuit according to claim 21, further comprising a microcomputer to initialize the write waveform controller and control the pulse width data stored in the memory to be updated in accordance with write conditions.

23. (NOT AMENDED) The adaptive writing circuit according to claim 21, wherein the memory stores the pulse width data of the first and/or last pulses of a write pulse waveform depending on whether the input data is in a land track or a groove track.

24. (NOT AMENDED) The adaptive writing circuit according to claim 21, wherein the memory stores the pulse width data of the first and/or last pulses of the write pulse waveform for respective zones on the optical recording medium.

25. (NOT AMENDED) The adaptive writing circuit according to claim 20, wherein light power for a predetermined one of channels of the adaptive write pulse is applied during a period corresponding to a varied width of the first pulse and during a period corresponding to a varied width of the last pulse.

26. (NOT AMENDED) The adaptive writing circuit according to claim 25, wherein the light power for the predetermined channel is a read power or a write power.

27. CANCELED.

Please ~~ADD~~ new claims 28-33 as follows.

28. (NEW) The adaptive writing circuit according to claim 19, wherein the generator generates pulse width data by varying a rising edge of the first pulse in accordance with the magnitude of the leading space and the magnitude of the present mark.

29. (NEW) The adaptive writing circuit according to claim 19, wherein the generator generates pulse width data by varying a falling edge of the first pulse in accordance with the magnitude of the leading space and the magnitude of the present mark.

30. (NEW) The adaptive writing circuit according to claim 19, wherein the generator generates pulse width data by varying a rising edge of the last pulse in accordance with the magnitude of the trailing space and the magnitude of the present mark.

31. (NEW) The adaptive writing circuit according to claim 19, wherein the generator generates pulse width data by varying a falling edge of the last pulse in accordance with the magnitude of the trailing space and the magnitude of the present mark.

32. (NEW) An adaptive writing circuit for writing input data to a optical recording medium using a write pulse for a light source and whose waveform includes a first pulse, a last pulse and a multi-pulse train, comprising:

a generator to generate an adaptive write pulse by varying a falling edge of the first pulse in accordance with a magnitude of a leading space and a magnitude of the present mark, and varying a falling edge of the second pulse in accordance with the magnitude of a trailing space and the magnitude of the present mark; and

a driver to drive the light source according to the adaptive write pulse.

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33. (NEW) An adaptive write pulse generating circuit, the adaptive write pulse being used for writing input data to an optical recording medium, comprising:

a write pulse inputting unit inputting a write pulse, the write pulse including a first pulse, a last pulse and a multi-pulse train;

a generator generating the adaptive write pulse by varying a falling edge of the first pulse in accordance with a magnitude of a leading space and a magnitude of a present mark, and varying a falling edge of the second pulse in accordance with a magnitude of a trailing space and the magnitude of the present mark; and

an outputting unit to output the generated adaptive write pulse.
